

Message Text

LIMITED OFFICIAL USE

PAGE 01 PARIS 17415 01 OF 04 141004Z
ACTION ACDA-10

INFO OCT-01 EUR-12 ISO-00 FEA-01 CIAE-00 INR-07 IO-13
L-03 NSAE-00 NSC-05 EB-07 NRC-05 OES-07 DODE-00
ERDA-05 SS-15 SP-02 PRS-01 /094 W
-----141022Z 060518 /12

P 141007Z JUN 77
FM AMEMBASSY PARIS
TO SECSTATE WASHDC PRIORITY 4087

LIMITED OFFICIAL USE SECTION 01 OF 04 PARIS 17415

E.O. 11652: N/A
TAGS: TECH, PFOR, MNUC, PARM, US, UK, IT, JA, FR, GW, CA
SUBJECT: RESULTS OF JUNE 8-9 SUMMIT NUCLEAR NON-
PROLIFERATION EXPERTS MEETING: DRAFT REPORT TO THE
SEVEN GOVERNMENTS

REF: PARIS 17135

1. THE FRENCH MFA DISTRIBUTED ON FRIDAY, JUNE 10, THE FINAL DRAFT OF PAPERS DEVELOPED AT THE SUBJECT MEETING: PARA 2, THE INTRODUCTORY REPORT; PARA 3, THE TECHNICAL AND ECONOMIC SCOPE (OF INFCEP); AND PARA 4, THE ORGANIZATION (OF INFCEP). THE INTRODUCTORY PORTION WAS DISTRIBUTED ONLY IN FRENCH; THE ENGLISH IS THIS EMBASSY'S INFORMAL TRANSLATION. THE OTHER TWO SECTIONS WERE DISTRIBUTED IN THE FRENCH AND ENGLISH LANGUAGES. COPIES OF THE PAPERS DISTRIBUTED HAVE BEEN SENT TO THE DEPARTMENT/OES.

2. INTRODUCTORY REPORT TO GOVERNMENTS.

THE CHIEFS OF STATE AND GOVERNMENT WHO MET IN LONDON ON MAY 7 AND 8, 1977, AGREED UNANIMOUSLY THAT IT WAS NECESSARY TO INTENSIFY THE USE OF NUCLEAR ENERGY TO MEET THE INCREASING NEEDS FOR ENERGY WORLDWIDE AND LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 02 PARIS 17415 01 OF 04 141004Z

TO ASSIST IN DIVERSIFYING SOURCES OF ENERGY. THEY ALSO AGREED THAT THIS NEED HAD TO BE MET THROUGH REDUCING THE RISKS OF NUCLEAR PROLIFERATION AND THAT SUCH A RESULT WOULD REQUIRE SIGNIFICANT INTERNATIONAL COOPERATION. IN ADDITION, THEY EMPHASIZED THAT FOR THIS POLICY TO BE EFFECTIVE, IT HAD TO BE ACCEPTABLE TO INDUSTRIALIZED COUNTRIES AS WELL AS DEVELOPING COUN-

TRIES.

TO SATISFY INCREASING ENERGY NEEDS, IT IS
NECESSARY FOR MANY INDUSTRIALIZED AS WELL AS DEVELOPING
COUNTRIES TO USE NUCLEAR ENERGY.

THE RISK OF PROLIFERATION OF NUCLEAR WEAPONS
BROUGHT ABOUT THROUGH THE DEVELOPMENT OF NUCLEAR
ENERGY, CAN ONLY BE REDUCED BY CONCERTED INTERNATIONAL
POLICY, WHICH WOULD UTILIZE VARIOUS MEANS TO HARMONIZE
REQUIREMENTS FOR THE FIGHT AGAINST PROLIFERATION WITH
AN INCREASED USE OF NUCLEAR ENERGY.

IT IS FOR THESE PURPOSES THAT THE INTERNATIONAL
ATOMIC ENERGY AGENCY WAS ESTABLISHED, THAT THE NON-
PROLIFERATION TREATY WAS SIGNED BY A LARGE NUMBER OF
COUNTRIES, AND THAT THE LONDON GUIDELINES WERE ADOPTED
BY THE PRINCIPAL EXPORTING COUNTRIES. AN IMPORTANT
SYSTEM OF INTERNATIONAL SAFEGUARDS HAS BEEN DEVELOPED
AND WIDELY ACCEPTED.

FOLLOWING THESE EFFORTS, IT IS NECESSARY TO
PROMOTE A WIDER INTERNATIONAL CONSENSUS IN THIS FIELD.

IN ADDITION, IT HAS BEEN QUESTIONED WHETHER IT
IS POSSIBLE TO CONTINUE WITH THE DEVELOPMENT OF CERTAIN
NUCLEAR TECHNOLOGIES WHILE COMPLYING WITH NON-PROLIFERA-
TION REQUIREMENTS.

IN THIS CONTEXT, THE SUGGESTION HAS BEEN MADE
TO STUDY ALL ASPECTS OF THE NUCLEAR FUEL CYCLE.

SUCH A STUDY SHOULD MAKE IT POSSIBLE:
- TO SUPPLY INFORMATION RELATIVE TO THE DEVELOP-
MENT OF EXISTING OR FUTURE NUCLEAR ENERGY SYSTEMS WHICH
WOULD REDUCE THE MAXIMUM POTENTIAL RISKS OF PROLIFERA-
LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 03 PARIS 17415 01 OF 04 141004Z

TION WHILE ENSURING FOR EACH NATION SAFE AND ACCEPTABLE
SOURCES OF ENERGY FROM AN ECONOMIC AS WELL AS AN
ENVIRONMENTAL POINT-OF-VIEW.

- TO INCREASE INTERNATIONAL COOPERATION IN
AREAS OF MUTUAL INTEREST LINKED TO THE UTILIZATION OF
NUCLEAR ENERGY FOR PEACEFUL PURPOSES AND TO OFFER THE
POSSIBILITY OF ORGANIZING EXCHANGES OF VIEWS AND TO
BETTER BRING TOGETHER POLICIES ADOPTED ON THIS MATTER.

AMONG COUNTRIES WHICH COULD PARTICIPATE IN SUCH
A PROGRAM, DIFFERENT TECHNIQUES OR NUCLEAR FUEL CYCLES
HAVE BEEN DEVELOPED AND DIFFERENT STRATEGIES OF THE
FUEL CYCLE HAVE BEEN ADOPTED, ACCORDING TO THEIR

INDUSTRIAL OPTIONS, THEIR SITUATION AND
THEIR NATIONAL ENERGY RESOURCES. (AT THE SAME TIME,
THEY WILL TAKE INTO ACCOUNT QUESTIONS STUDIED IN THE
PROGRAM WHEN THEY MAKE THEIR NATIONAL DECISIONS.)
DURING THE IMPLEMENTATION OF SUCH A PROGRAM, IT SHOULD

BE THEIR COMMON INTENTION TO COMPLY WITH THEIR CHOICES

LIMITED OFFICIAL USE

NNN

LIMITED OFFICIAL USE

PAGE 01 PARIS 17415 02 OF 04 141010Z

ACTION ACDA-10

INFO OCT-01 EUR-12 ISO-00 FEA-01 CIAE-00 INR-07 IO-13
L-03 NSAE-00 NSC-05 EB-07 NRC-05 OES-07 DODE-00
ERDA-05 SS-15 SP-02 PRS-01 /094 W
-----141022Z 060612/12

P 141007Z JUN 77

FM AMEMBASSY PARIS

TO SECSTATE WASHDC PRIORITY 4088

LIMITED OFFICIAL USE SECTION 02 OF 04 PARIS 17415

AND THEIR OWN DECISIONS IN THIS FIELD (AND TO AVOID
ENDANGERING THEIR RESPECTIVE FUEL CYCLE STRATEGIES WHEN
THEY PROVIDE FOR THE UTILIZATION OF FUEL LEGITIMATELY
ACQUIRED PROVIDED THAT STEPS WHICH HAVE BEEN AGREED
UPON, INCLUDING SAFEGUARDS, BE APPLIED.)

THE FACT IS THAT TO PROCEED WITH THIS STUDY
DOES NOT MEAN THAT GOVERNMENTS HAVE TO ACCEPT ITS
RESULTS.

(ON THE ASSUMPTION THAT SUCH A PROGRAM WOULD BE
UNDERTAKEN,) THE PURPOSE OF THE PRESENT DOCUMENT IS TO
SUGGEST WHAT ITS MANDATE WOULD BE. SUGGESTIONS MADE
BY OTHER PARTICIPATING COUNTRIES WILL ALSO HAVE TO BE
TAKEN INTO ACCOUNT.

3.

I. TECHNICAL AND ECONOMIC SCOPE (1)

1) FUEL AND HEAVY WATER AVAILABILITY

 A) ESTIMATED NEEDS FOR NUCLEAR ENERGY, AND
 CORRELATED NEEDS FOR URANIUM, ACCORDING TO DIFFERENT
 FUEL CYCLE STRATEGIES.

 B) URANIUM AVAILABILITY

 - ASSESSMENT OF RESOURCES AND PRODUCTION
 CAPACITIES;

LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 02 PARIS 17415 02 OF 04 141010Z

- POLICIES AND INCENTIVES FOR ENCOURAGING EXPLORATION AND PRODUCTION INCLUDING JOINT VENTURES;
- MARKETING POLICIES AND/OR GUARANTEES OF SALES FOR COMPANIES INVESTING IN EXPLORATION AND PRODUCTION;

(1) THE SPLITTING AMONG CHAPTERS HEREAFTER PRESENTED IS INDICATIVE AND MAY BE CHANGED FOR THE SAKE OF BETTER EFFICIENCY.

- MARKETING POLICIES AND/OR GUARANTEES OF SUPPLY FOR UTILITIES;
- TECHNICAL DEVELOPMENT OF EXPLORATION AND MINING METHODS.

C) HEAVY WATER AVAILABILITY

D) THORIUM AVAILABILITY

2) ENRICHMENT AVAILABILITY

A) ENRICHMENT NEEDS AND AVAILABILITY ACCORDING TO VARIOUS FUEL CYCLE STRATEGIES:

- JOINT PLANNING OF FUTURE CAPACITIES;
- OPPORTUNITIES FOR CROSS-INVESTMENT;
- FREEDOM OF CHOICE FOR CUSTOMERS IN AN OPEN MARKET;

B) COMPARISON OF THE PROLIFERATION RISKS OF THE VARIOUS ENRICHMENT TECHNIQUES.

3) ASSURANCES FOR LONG TERM SUPPLY IN THE INTEREST OF NONPROLIFERATION

- INCENTIVES FOR LONG TERM COMMERCIAL CONTRACTS BETWEEN PRODUCERS AND CONSUMERS
- GUARANTEES OF ASSURED SUPPLY AND RELATIONSHIP TO FUTURE NATIONAL EXPORT AND NONPROLIFERATION POLICIES;
- MULTINATIONAL OR INTERNATIONAL MECHANISMS GUARANTEEING SUPPLIES IN CASE OF UNEXPECTED CUTTING OFF OF SUPPLIES.

4) REPROCESSING, SEPARATED PLUTONIUM, RECYCLE

LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 03 PARIS 17415 02 OF 04 141010Z

- A) REPROCESSING.
 - STUDY OF THE ECONOMIC ENVIRONMENTAL AND ENERGY ASPECTS OF REPROCESSING ON A FULL INDUSTRIAL SCALE;
 - IMPROVEMENT OF SAFEGUARDS TECHNIQUES;
 - REGIONAL FUEL CYCLE CENTERS;
 - ALTERNATIVE REPROCESSING METHODS INCLUDING COPROCESSING SPIKING OR DELIVERY OF PLUTONIUM

IN THE FORM OF MIXED OXIDE OR EVEN FUEL

ELEMENTS, POSSIBLY PREIRRADIATED;

- WASTE MANAGEMENT.

B) SEPARATED PLUTONIUM

- CONDITIONS AND POSSIBLE RESTRICTIONS FOR
STORAGE, TRANSPORT AND USE OF HIGHLY CONCEN-
TRATED PLUTONIUM;
- INTERNATIONAL CONTROL OF SEPARATED PLUTONIUM

LIMITED OFFICIAL USE

NNN

LIMITED OFFICIAL USE

PAGE 01 PARIS 17415 03 OF 04 141012Z
ACTION ACDA-10

INFO OCT-01 EUR-12 ISO-00 FEA-01 CIAE-00 INR-07 IO-13
L-03 NSAE-00 NSC-05 EB-07 NRC-05 OES-07 DODE-00
ERDA-05 SS-15 SP-02 PRS-01 /094 W
-----141021Z 060712/12

P 141007Z JUN 77

FM AMEMBASSY PARIS

TO SECSTATE WASHDC PRIORITY 4089

LIMITED OFFICIAL USE SECTION 03 OF 04 PARIS 17415

INCLUDING STORAGE UNDER THE AUSPICES OF IAEA
AND RELEASE CRITERIA PROBLEMS.

C) RECYCLE IN THERMAL REACTORS

- STUDY OF THE ECONOMIC ENVIRONMENTAL AND
ENERGY ASPECTS OF THE CONCEPT ON AN INDUSTRIAL
SCALE;
- SAFEGUARDS PROBLEMS SPECIFIC TO RECYCLING;
- POSSIBLE URANIUM ONLY RECYCLE.

5) FAST BREEDERS

- STUDY OF THE ECONOMIC ENVIRONMENTAL AND ENERGY
ASPECTS OF THE CONCEPT ON AN INDUSTRIAL SCALE.
- SAFEGUARDS.
- REPROCESSING MODES (SAME SUBTITLES AS FOR
CHAPTER 4 A) ABOVE).

6) SPENT FUEL STORAGE AND DISPOSAL FOR PRESENT
THERMAL REACTORS

A) STORAGE STRATEGIES AND COSTS

- FOR LIGHT WATER REACTORS
- FOR HEAVY WATER REACTORS
- FOR GAS-COOLED REACTORS

B) SHORT-TERM/INTERMEDIATE STORAGE

- WAYS OF INCREASING SPENT FUEL STORAGE.

LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 02 PARIS 17415 03 OF 04 141012Z

- SITING AND TRANSPORTATION PROBLEMS.
- MORE EFFICIENT UTILIZATION OF EXISTING SPENT FUEL CAPACITY.
- ENVIRONMENT SAFEGUARDS AND SAFETY ASPECTS INCLUDING FUEL INTEGRITY PROBLEMS AND ASSOCIATED RISKS.
- COSTS.
- LEGAL CONSTRAINTS.

C) SPENT FUEL REPOSITORIES (PERMANENT OR RETRIEVABLE)

- SITING PROBLEMS INCLUDING INTERNATIONAL REPOSITORIES.
- POSSIBILITIES OR RISKS OF FURTHER RECOVERY.
- ENVIRONMENT AND SAFETY ASPECTS INCLUDING FUEL INTEGRITY PROBLEMS AND ASSOCIATED RISKS AND PROTECTIONS AGAINST POSSIBLE DISSEMINATION OF FISSION PRODUCTS.
- COSTS.
- LEGAL CONSTRAINTS.

7) ONCE-THROUGH FUEL UTILIZATION FOR PRESENT THERMAL REACTORS.

A) METHODS TO INCREASE ONCE-THROUGH FUEL UTILIZATION

- OPTIMIZED FUEL AND LOADING DESIGNS,
- TANDEM CYCLE,
- SPECTRAL SHIFT.

B) ENERGY BALANCE AND ECONOMIC SAFEGUARDING AND ENVIRONMENTAL ASPECTS OF ONCE-THROUGH UTILIZATION

- FOR LIGHT WATER REACTORS,
- FOR HEAVY WATER REACTORS,
- GAS-COOLED REACTORS.

8) OTHER REACTORS AND FUEL CYCLE CONCEPTS

A) PRODUCTION UTILIZATION AND SAFEGUARDS OF HIGHLY ENRICHED URANIUM FOR POWER REACTORS.

B) RESEARCH REACTORS: USE OF HIGHLY ENRICHED URANIUM AND POSSIBLE ALTERNATIVES.

LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 03 PARIS 17415 03 OF 04 141012Z

C) THORIUM - U233 CYCLE.

D) LIGHT WATER AND THORIUM BREEDER CONCEPTS.

E) HIGH TEMPERATURE REACTORS.

F) OTHER ADVANCED REACTOR CONCEPTS.

WITH, WHEN RELEVANT, IN EACH CASE:

- IDENTIFICATION OF THE FUEL CYCLE STAGES AT WHICH NUCLEAR WEAPONS USABLE MATERIAL MAY BE SEPARATED, AND THE POSSIBLE MEANS OF MINIMIZING PROLIFERATION RISKS,
- ECONOMIC ENVIRONMENT AND ENERGY ASPECTS,
- COMMERCIALIZATION LEAD-TIMES,
- SAFETY PROBLEMS.

LIMITED OFFICIAL USE

NNN

LIMITED OFFICIAL USE

PAGE 01 PARIS 17415 04 OF 04 141009Z
ACTION ACDA-10

INFO OCT-01 EUR-12 ISO-00 FEA-01 CIAE-00 INR-07 IO-13
L-03 NSAE-00 NSC-05 EB-07 NRC-05 OES-07 DODE-00
ERDA-05 SS-15 SP-02 PRS-01 /094 W
-----141022Z 060624 /12

P 141007Z JUN 77
FM AMEMBASSY PARIS
TO SECSTATE WASHDC PRIORITY 4090

LIMITED OFFICIAL USE SECTION 04 OF 04 PARIS 17415

4. II. ORGANIZATION.

IF SUCH A PROGRAM WAS TO BE DECIDED, THE PROGRAM WOULD BE OPEN TO ALL COUNTRIES INTERESTED IN ITS WORK; IT IS SUGGESTED THAT ONE INTERNATIONAL WORKING GROUP BE CREATED FOR EACH OF THE AFOREMENTIONED CHAPTERS, COMPOSED OF REPRESENTATIVES OF COUNTRIES DESIRING TO TAKE PART. ONE OF THESE COUNTRIES SHOULD BE DESIGNATED TO PROVIDE A CHAIRMAN, ASSISTED BY REPRESENTATIVES OF ONE OR MORE COUNTRIES.

IT WOULD BE UP TO EACH GROUP TO DECIDE, AFTER CONSULTATION WITH THE CHAIRMEN OF THE OTHER GROUPS,

WHETHER OR NOT SUB-GROUPS WHICH WOULD REPORT TO THE GROUP, SHOULD BE CREATED.

THERE WOULD NOT BE COMMON FUNDING OF THE STUDIES, EACH PARTICIPATING COUNTRY, INCLUDING THOSE PROVIDING CHAIRMEN, BEING RESPONSIBLE FOR THE EXPENSES OF ITS OWN PARTICIPATION.

EACH GROUP OR SUB-GROUP WOULD DISTRIBUTE ITS WORK AMONGST ITS MEMBERS. COOPERATIVE STUDIES BETWEEN NATIONAL ORGANIZATIONS OR INDUSTRIES OF PARTICIPATING COUNTRIES WOULD BE ORGANIZED TO THE EXTENT POSSIBLE. ANY CONTRIBUTION BY A PARTICIPATING COUNTRY LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 02 PARIS 17415 04 OF 04 141009Z

WOULD BE WELCOME.

IN ORDER TO ENABLE THE VARIOUS GROUPS TO GATHER THE MOST COMPLETE AND REALISTIC INFORMATION IN THEIR RESPECTIVE FIELD, ALL PARTICIPANTS WOULD DO THEIR BEST TO FACILITATE THE EXCHANGE OF THE DATA NECESSARY FOR THE COMPLETION OF THE EVALUATION PROGRAM.

THE VARIOUS GROUPS SHOULD REPORT TO A CONFERENCE OF THE PARTICIPATING COUNTRIES WHICH WOULD MEET AT LEAST ONCE A YEAR. AS MANY STUDIES AS POSSIBLE SHOULD BE COMPLETED IN TWO YEARS OR LESS. THESE REPORTS AND THESE STUDIES WOULD EXPRESS, AS FAR AS POSSIBLE, A UNANIMOUS POSITION BUT EACH PARTICIPANT WOULD BE ENTITLED TO INCLUDE A DISSENTING OPINION IF IT SO WISHED. A TECHNICAL COORDINATING COMMITTEE COMPOSED OF THE CHAIRMEN OF THE WORKING GROUPS AND REPRESENTATIVES OF COUNTRIES WHICH ASSIST THEM, AS PROVIDED IN THE FIRST PARAGRAPH, MIGHT BE CONVENED FROM TIME TO TIME TO COORDINATE THE WORK OF THE VARIOUS GROUPS.

IF THE IAEA SO AGREES, THE WORK OF EVALUATION COULD MAKE USE OF THE CAPABILITIES OF THIS AGENCY. THE IAEA COULD BE REPRESENTED IN ALL GROUPS AND COMMITTEES PARTICIPATING IN THE PROGRAM. THE AGENCY COULD BE ASKED, IN PARTICULAR, TO PROVIDE SECRETARIAT SERVICES. OTHER INTERNATIONAL ORGANIZATIONS COULD CONTRIBUTE AS APPROPRIATE.

GAMMON

LIMITED OFFICIAL USE

NNN

Message Attributes

Automatic Decaptoning: X
Capture Date: 01-Jan-1994 12:00:00 am
Channel Indicators: n/a
Current Classification: UNCLASSIFIED
Concepts: NUCLEAR PROLIFERATION, MEETING REPORTS, SUMMIT MEETINGS, CONSULTANTS
Control Number: n/a
Copy: SINGLE
Sent Date: 14-Jun-1977 12:00:00 am
Decaption Date: 01-Jan-1960 12:00:00 am
Decaption Note:
Disposition Action: RELEASED
Disposition Approved on Date:
Disposition Case Number: n/a
Disposition Comment: 25 YEAR REVIEW
Disposition Date: 22 May 2009
Disposition Event:
Disposition History: n/a
Disposition Reason:
Disposition Remarks:
Document Number: 1977PARIS17415
Document Source: CORE
Document Unique ID: 00
Drafter: n/a
Enclosure: n/a
Executive Order: N/A
Errors: N/A
Expiration:
Film Number: D770211-0921
Format: TEL
From: PARIS
Handling Restrictions: n/a
Image Path:
ISecure: 1
Legacy Key: link1977/newtext/t19770659/aaaabzqb.tel
Line Count: 429
Litigation Code IDs:
Litigation Codes:
Litigation History:
Locator: TEXT ON-LINE, ON MICROFILM
Message ID: b2c7417d-c288-dd11-92da-001cc4696bcc
Office: ACTION ACDA
Original Classification: LIMITED OFFICIAL USE
Original Handling Restrictions: n/a
Original Previous Classification: n/a
Original Previous Handling Restrictions: n/a
Page Count: 8
Previous Channel Indicators: n/a
Previous Classification: LIMITED OFFICIAL USE
Previous Handling Restrictions: n/a
Reference: 77 PARIS 17135
Retention: 0
Review Action: RELEASED, APPROVED
Review Content Flags:
Review Date: 16-Feb-2005 12:00:00 am
Review Event:
Review Exemptions: n/a
Review Media Identifier:
Review Release Date: n/a
Review Release Event: n/a
Review Transfer Date:
Review Withdrawn Fields: n/a
SAS ID: 2158359
Secure: OPEN
Status: NATIVE
Subject: RESULTS OF JUNE 8-9 SUMMIT NUCLEAR NON- PROLIFERATION EXPERTS MEETING: DRAFT REPORT TO THE SEVEN GOVERNMENTS
TAGS: TECH, PFOR, MNUC, PARM, US, UK, IT, JA, FR, GE, CA
To: STATE
Type: TE
vdkgvwkey: odbc://SAS/SAS.dbo.SAS_Docs/b2c7417d-c288-dd11-92da-001cc4696bcc
Review Markings:
Margaret P. Grafeld
Declassified/Released
US Department of State
EO Systematic Review
22 May 2009
Markings: Margaret P. Grafeld Declassified/Released US Department of State EO Systematic Review 22 May 2009